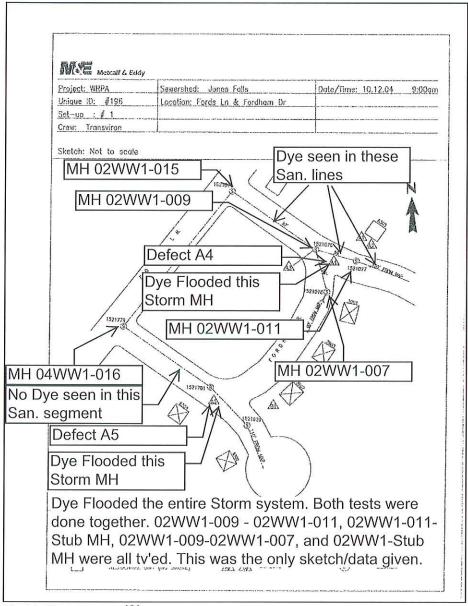


Smoke and Dye-Water Observation Summary

Western Run Pilot Project - Baltimore Maryland

FIELD SKETCH



Sketch No:

196

Filename Path:

X:\Baltimore City\Western Run Pilot Area - Data Files\Smoke Testing\Pictures\Sketches\196.tif

Image Status: Image found and displayed.

NOTE: Sanitary sewer alignments and connectivity in the Western Run GIS have been revised following smoke testing to reflect updated information from various sources and may no longer match the field sketches shown.



INSPECTION REPORT

| DATE: 03/21/2005 | WORK ORDER: | WEATHER: SUNNY, DRY | OPERATOR: J.A.M. | SECTION NR: 10 | SECTION NAME: |
|---------------------|--------------------|------------------------|---------------------|-------------------|---------------|
| PRESENT: | VEHICLE: TV 175 | CAMERA: PAN/TILT | PRESET: | CLEANED: NO | RATE: 2860 |

| STREET: | FORDHAM DR. TEST 196 A 4 | MAP #1: | 1 | | MH: | 1521076 |
|------------|--------------------------|---------|-----|------------|-----------------------------|----------|
| CITY: | BALTIMORE | MAP #2: | | | MH: | 1521077 |
| LOCALE: | SMALL RESIDENTIAL STREET | TAPE #: | JAM | 1 | TV'D LGTH: | 58.15 ft |
| INSPECT RE | ASON: OTHER | | | PIPE SIZE: | 8 in | |
| SECTION TY | PE: WASTEWATER | | | | VCP JT LGTH: NO RELINING | |
| AREA: | 01-WR27 | | | RSRVD: | NO RELIMING | |

REMARK:

| 1:150 | DIST | OBSERVATION | RATE | VCR# | PH |
|--------|--------------|---------------------------------------------------------|------|----------|--------|
| 521076 | <u>0.00</u> | inspection begins at downstream manhole, 1521076 | 0 | 00:24:56 | |
| | 14.29 | Infiltration Running at joint at 02 o'clockTO 5 O'CLOCK | 3 | 00:29:49 | 25a, b |
| | 17.41 | Infiltration Running at joint at 03 o'clock | 3 | 00:30:52 | 26a |
| | 17.41 | Infiltration Seeping at joint at 09 o'clock | 2 | 00:30:52 | 27a |
| | 19.82 | Infiltration Gushing at joint at 04 o'clock | 4 | 00:31:19 | 28a |
| | 23.24 | Infiltration Running at joint at 04 o'clock | 3 | 00:31:55 | 29a |
| | 26.36 | Infiltration Gushing at joint at 03 o'clock | 4 | 00:32:28 | 30a |
| | 29.78 | Infiltration Running at joint at 03 o'clock | 3 | 00:33:13 | 31a |
| | 40.04 | service connection at 09 o'clock | 0 | 00:35:25 | |
| | 50.31 | Infiltration Running at joint at 03 o clock | 3 | 00:36:27 | 33a |
| 521077 | <u>58.15</u> | inspection ends at upstream manhole, 1521077 | 0 | 00:37:25 | |



| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 10 | |



IMAGE: 25a, TAPE #: JAM 1, 00:29:49 14.29FT, Infiltration Running at joint at 02 o'clockTO 5 O'CLOCK



IMAGE: 25b, TAPE #: JAM 1, 00:29:49 14.29FT, Infiltration Running at joint at 02 o'clockTO 5 O'CLOCK



IMAGE: 26a, TAPE #: JAM 1, 00:30:52 17.41FT, Infiltration Running at joint at 03 o´clock



IMAGE: 27a, TAPE #: JAM 1, 00:30:52 17.41FT, Infiltration Seeping at joint at 09 o'clock



INCOPPOTION IMAGES

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| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 10 | |



IMAGE: 28a, TAPE #: JAM 1, 00:31:19 19.82FT, Infiltration Gushing at joint at 04 o´clock



IMAGE: 29a, TAPE #: JAM 1, 00:31:55 23.24FT, Infiltration Running at joint at 04 o'clock



IMAGE: 30a, TAPE #: JAM 1, 00:32:28 26.36FT, Infiltration Gushing at joint at 03 o'clock



IMAGE: 31a, TAPE #: JAM 1, 00:33:13 29.78FT, Infiltration Running at joint at 03 o´clock



INSPECTION IMAGES

| - | | | 535 (30, 30,5 | | OFOTION MAME |
|---|-----------|--------------------------|---------------------------|-----------------------------------------|-----------------------------------------|
| 1 | CITY: | STREET: | l DATE: | SECTION NR: | SECTION NAME: |
| 1 | | | 280 th Co. 480 th Co. 201 | 110000000000000000000000000000000000000 | ODDA-SECRETAR VENEZONEN CHEROMOGRAPHICA |
| 1 | BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 10 | |

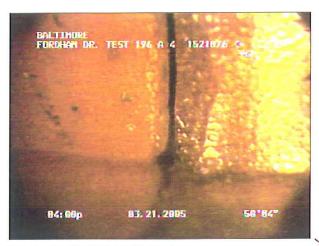


IMAGE: 33a, TAPE #: JAM 1, 00:36:27 50.31FT, Infiltration Running at joint at 03 o´clock



INSPECTION REPORT

| DATE: 03/21/2005 | WORK ORDER: | WEATHER: SUNNY, DRY | OPERATOR: J.A.M. | SECTION NR: 11 | SECTION NAME: |
|---------------------|--------------------|------------------------|---------------------|-------------------|---------------|
| PRESENT: | VEHICLE: TV 175 | CAMERA: PAN/TILT | PRESET: | CLEANED: NO | RATE: 4455 |

| STREET: | FORDHAM DR. TEST 196 A 4 | MAP #1: | 1 | MH: | 1521077 |
|------------|--------------------------|---------|----------------------|-----------------------------|--------------|
| CITY: | BALTIMORE | MAP #2: | | MH: | STUB NO M.H. |
| LOCALE: | SMALL RESIDENTIAL STREE | TAPE #: | JAM 1 | TV'D LGTH: | 113.49 ft |
| INSPECT RE | EASON: OTHER | | PIPE SIZE: | 8 in | |
| SECTION TY | YPE: WASTEWATER | | MATERIAL: LINING: | VCP JT LGTH: NO RELINING | |
| AREA: | 01-WR27 | | RSRVD: | | |
| REMARK: | | | | | |

1:300 DIST **OBSERVATION** RATE VCR# PH 00:37:25 inspection begins at downstream manhole, 1521077 0 0.00 52107 Infiltration Running at joint at 04 o'clock 00:38:34 36a Infiltration Running at joint at 04 o'clock 00:39:30 37a 6.44 Infiltration Running at joint at 04 o'clock 3 00:42:57 38a 22.03 24.65 gasket exposed, from 02 to 04 o'clock 00:43:32 39a roots light, from 01 to 04 o'clock 00:44:32 40a 30.49 33.71 roots light, from 01 to 04 o'clock 00:44:59 41a service connection with infiltration running inside at 03 o'clock3 00:45:35 42a Infiltration Seeping at joint at 03 o'clock 00:45:58 43a Infiltration Seeping at joint at 11 o'clock 00:45:58 44a 35.92 break-in-connection with infiltration gushing inside at 10 o'clock 00:46:57 45a 40.45 break-in-connection with infiltration gushing inside at 10 o'clock 00:47:34 46a 40.45 service connection with infiltration running inside at 09 o'clock3 00:48:31 47a Infiltration Running at joint at 04 o'clock 00:48:55 48a 55.64 roots medium, from 12 to 12 o'clock 2 00:49:29 49a roots medium, from 12 to 12 o'clock, START 00:50:13 50a 68.01 S1 00:52:08 service connection at 09 o'clock STUB NO M.H. inspection ends at STUB 00:52:25 53a 113.49



| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|------------------------------------------------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 11 | P(0) P(4) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2 |



IMAGE: 36a, TAPE #: JAM 1, 00:38:34 3.32FT, Infiltration Running at joint at 04 o'clock



IMAGE: 37a, TAPE #: JAM 1, 00:39:30 6.44FT, Infiltration Running at joint at 04 o'clock



IMAGE: 38a, TAPE #: JAM 1, 00:42:57 22.03FT, Infiltration Running at joint at 04 o'clock



IMAGE: 39a, TAPE #: JAM 1, 00:43:32 24.65FT, gasket exposed, from 02 to 04 o'clock



| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 11 | |



IMAGE: 40a, TAPE #: JAM 1, 00:44:32 30.49FT, roots light, from 01 to 04 o'clock



IMAGE: 41a, TAPE #: JAM 1, 00:44:59 33.71FT, roots light, from 01 to 04 o'clock



IMAGE: 42a, TAPE #: JAM 1, 00:45:35 35.31FT, service connection with infiltration running inside at 03 o'clock



IMAGE: 43a, TAPE #: JAM 1, 00:45:58 35.92FT, Infiltration Seeping at joint at 03 o'clock



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| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 11 | |



IMAGE: 44a, TAPE #: JAM 1, 00:45:58 35.92FT, Infiltration Seeping at joint at 11 o'clock



IMAGE: 45a, TAPE #: JAM 1, 00:46:57 40.45FT, break-in-connection with infiltration gushing inside at 10 o´clock

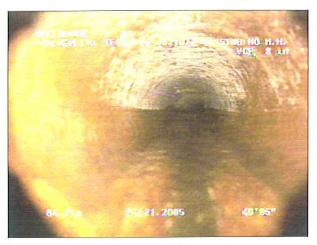


IMAGE: 46a, TAPE #: JAM 1, 00:47:34 40.45FT, break-in-connection with infiltration gushing inside at 10 o´clock



IMAGE: 47a, TAPE #: JAM 1, 00:48:31 46.58FT, service connection with infiltration running inside at 09 o'clock



| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 11 | |



IMAGE: 48a, TAPE #: JAM 1, 00:48:55 47.49FT, Infiltration Running at joint at 04 o'clock



IMAGE: 49a, TAPE #: JAM 1, 00:49:29 55.64FT, roots medium, from 12 to 12 o'clock



IMAGE: 50a, TAPE #: JAM 1, 00:50:13 68.01FT, roots medium, from 12 to 12 o'clock, START



IMAGE: 53a, TAPE #: JAM 1, 00:52:25 113.49FT, inspection ends at STUB



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INSPECTION REPORT

| DATE: 03/21/2005 | WORK ORDER: | WEATHER: SUNNY, DRY | OPERATOR: J.A.M. | SECTION NR: 12 | SECTION NAME: |
|---------------------|--------------------|------------------------|---------------------|-------------------|---------------|
| PRESENT: | VEHICLE: TV 175 | CAMERA: PAN/TILT | PRESET: | CLEANED: NO | RATE: 1920 |

| STREET: | FORDHAM DR. TEST 196 A 4 | MAP #1: | 1 | MH: | 1521076 | | |
|-------------|--------------------------|---------|-------|------------|----------|--|--|
| CITY: | BALTIMORE | MAP #2: | | MH: | 1521078 | | |
| LOCALE: | SMALL RESIDENTIAL STREET | TAPE #: | JAM 1 | TV'D LGTH: | 85.32 ft | | |
| INCOPEDE DE | NADECT REACON. OTHER | | | | | | |

RSRVD:

INSPECT REASON: OTHER PIPE SIZE: 8 in

SECTION TYPE: WASTEWATER MATERIAL: VCP JT LGTH: LINING: NO RELINING

AREA: 01-WR27

| R | F | NA | Δ | K | |
|---|---|----|---|---|--|
| | | | | | |

| | 1:225 | DIST | OBSERVATION | RATE | VCR# | PH | |
|---|--------|----------------|---------------------------------------------------------------------------------|------|----------------------|-----|--|
| | 521076 | 0.00 | inspection begins at downstream manhole, 1521076 | 0 | 00:52:25 | | |
| | | 10.97 | Infiltration Running at joint at 09 o clock | 3 | 00:54:00 | 55a | |
| | | 13.78 | Infiltration Running at joint at 02 o'clock | 3 | 00:54:23 | 56a | |
| | | 13.78 | Infiltration Running at joint at 09 o clock | 3 | 00:54:40 | 57a | |
| | | 16.30 | Infiltration Running at joint at 12 o'clock to 12 o'clock | 3 | 00:55:03 | 58a | |
| 1 |) | 19.82 | Infiltration Running at joint at 03 o clock | 3 | 00:55:26 | 59a | |
| A | | 26.36 | Infiltration Running at joint at 09 o'clock | 3 | 00:56:16 | 60a | |
| | | 51.92 60.17 | service connection capped at 03 o'clock service connection capped at 09 o'clock | 0 | 00:57:39 00:58:09 | | |
| | 521078 | 85.32 | inspection ends at upstream manhole, 1521078 | 0 | 00:59:32 | | |



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| CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
|-----------|--------------------------|------------|-------------|---------------|
| BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 12 | |

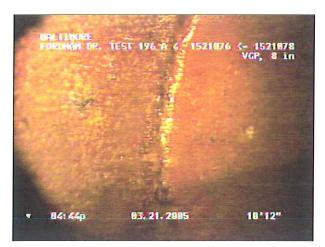


IMAGE: 55a, TAPE #: JAM 1, 00:54:00 10.97FT, Infiltration Running at joint at 09 o'clock



IMAGE: 56a, TAPE #: JAM 1, 00:54:23 13.78FT, Infiltration Running at joint at 02 o'clock



IMAGE: 57a, TAPE #: JAM 1, 00:54:40 13.78FT, Infiltration Running at joint at 09 o'clock



IMAGE: 58a, TAPE #: JAM 1, 00:55:03 16.3FT, Infiltration Running at joint at 12 o'clock to 12 o'clock



| ı | | | | | |
|-----|-----------|--------------------------|------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| - | CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
| - 1 | BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 12 | WOW COMMITTEE AT DUST AT DUST AT DESCRIPTION OF THE STATE |



IMAGE: 59a, TAPE #: JAM 1, 00:55:26 19.82FT, Infiltration Running at joint at 03 o'clock



IMAGE: 60a, TAPE #: JAM 1, 00:56:16 26.36FT, Infiltration Running at joint at 09 o'clock



INSPECTION REPORT

| DATE: 03/21/2005 | WORK ORDER: | WEATHER: SUNNY, DRY | OPERATOR: J.A.M. | SECTION NR: 13 | SECTION NAME: |
|---------------------|--------------------|------------------------|---------------------|-------------------|---------------|
| PRESENT: | VEHICLE: TV 175 | CAMERA: PAN/TILT | PRESET: | CLEANED: NO | RATE: 330 |

STREET: FORDHAM DR. TEST 196 A 4 MAP #1: 1 MH: 1521078 CITY: BALTIMORE MAP #2: MH: STUB NO M.H. LOCALE: SMALL RESIDENTIAL STREET TAPE #: JAM 1 TV'D LGTH: 25.35 ft INSPECT REASON: OTHER PIPE SIZE: 8 in

MATERIAL: VCP JT LGTH: SECTION TYPE: WASTEWATER LINING: NO RELINING

AREA: 01-WR27 RSRVD: REMARK:

1:75 DIST **OBSERVATION** RATE VCR # PH

0.00 inspection begins at downstream manhole, 1521078 00:59:32 521078

> 5.43 S1 roots heavy, from 12 to 12 o'clock, START 01:00:36 65a

25.35 camera blocked, inspection abandoned, HEAVY ROOTS 01:07:07 66a



| - | | | | | |
|---|-----------|--------------------------|------------|-------------|---------------|
| | CITY: | STREET: | DATE: | SECTION NR: | SECTION NAME: |
| | BALTIMORE | FORDHAM DR. TEST 196 A 4 | 03/21/2005 | 13 | |



IMAGE: 65a, TAPE #: JAM 1, 01:00:36 5.43FT, roots heavy, from 12 to 12 o'clock, START



IMAGE: 66a, TAPE #: JAM 1, 01:07:07 25.35FT, camera blocked, inspection abandoned, HEAVY ROOTS